

Manuscript version: Author's Accepted Manuscript

The version presented in WRAP is the author's accepted manuscript and may differ from the published version or Version of Record.

Persistent WRAP URL:

<http://wrap.warwick.ac.uk/97975>

How to cite:

Please refer to published version for the most recent bibliographic citation information. If a published version is known of, the repository item page linked to above, will contain details on accessing it.

Copyright and reuse:

The Warwick Research Archive Portal (WRAP) makes this work by researchers of the University of Warwick available open access under the following conditions.

Copyright © and all moral rights to the version of the paper presented here belong to the individual author(s) and/or other copyright owners. To the extent reasonable and practicable the material made available in WRAP has been checked for eligibility before being made available.

Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

Publisher's statement:

Please refer to the repository item page, publisher's statement section, for further information.

For more information, please contact the WRAP Team at: wrap@warwick.ac.uk.

THE SOCIOLOGY OF SLEEP

Robert Meadows¹, Simon J. Williams², Jon Gabe³, Catherine Coveney⁴ & Sara Arber¹

Chapter for Cappuccio, F, Miller, M. and Lockley S. (eds.) Oxford: Oxford University Press.

1. Department of Sociology

University of Surrey

Guildford

Surrey GU7 7XH, UK

2. Department of Sociology,

University of Warwick

Coventry

CV4 7AL, UK

3. Centre for Criminology and Sociology

Royal Holloway, University of London

Egham

TW20 0EX

4. Centre for Global Health Policy

University of Sussex

Falmer, Brighton

BN1 9RH

Introduction

Over the past decade, sociological studies have convincingly demonstrated that sleep is a socially, culturally and historically variable phenomenon. How we sleep, when we sleep, where we sleep, what meaning and value we accord sleep, let alone with whom we sleep, vary around the world, both past and present, within and between cultures and within different segments of society. This chapter outlines two interrelated strands of recent sociological work; how (i) sleep is a ‘practice’, which is ‘done’ and ‘negotiated’ with others; and (ii) the problems and prospects surrounding the medicalisation of sleep. The concluding section summarises the importance of sociological studies of sleep for public health.

Sleep is a ‘practice’, which is ‘done’ and ‘negotiated’ with others

An underlying assumption of the sociology of sleep is that sleep is not simply a private, biological, matter; rather it is embedded within social interactions and everyday life. Viewing sleep as a ‘practice’, which is ‘done’ and ‘negotiated’ with others shifts the emphasis towards rich understanding of the *patterning* of everyday, micro, practices of sleep. Through this lens, sociological studies of sleep have made visible – for example - previously hidden components of the relationship between caregiving across the life course and sleep. Research with heterosexual couples illustrates the lack of explicit discussion between partners about who provides care for children at night (Venn et al. 2008). Within couples, it is almost tacitly assumed that women should get up in the night to deal with, for example, nappy changing or settling anxious children and this continues even when women return to employment or full-time education. These night-time roles are not restricted to the direct provision of care, such as attending to the physical needs of children, but also relate to women’s engagement in the emotional labour of worrying about and anticipating the night-time needs of their family members. Bianchara and Arber (2007) also highlight how caregiving for partners and older relatives can impact on sleep long after their actual caregiving has stopped. Caregivers can get into the habit of ‘light’ sleeping, listening out, and can become haunted by distressing images of caring.

Sleep is further patterned according to factors which include education, employment status, social class and marital status (see Figure 1 below). Within contemporary Western societies, those with no qualifications report the poorest sleep quality and longest sleep latency; as well as greater problems with sleep maintenance. The unemployed report poorer sleep than the employed. Among the employed, those in semi-routine and routine occupations report the

poorest sleep. People's own definitions and normative expectations regarding 'ideal', 'adequate' or 'enough' sleep, are also likely to be patterned according to sociological or socio-demographic factors such as gender, class, occupation and education; as are their responses to disturbed sleep.

INSERT FIGURE 1

The sociology of sleep aims to elucidate how these (micro) 'practices' and 'negotiations' relate to, and are shaped by wider 'macro-level' patterns and structures. For Hale and Hale (2009: 361), these patterns suggest that "people who have more opportunities available to them, who have more control over their life projects – that is, people who have a distinct track record of self-governance and purpose – are those who have more optimal sleep durations and better quality sleep overall." For Hislop and Arber (2006: 227), sleep is embedded within four temporal dynamics (Hislop and Arber 2006: 227): (i) *Biological or physiological ageing*. Physiological changes with age, which include increasing frailty, reduction in strength, impairment, increasing levels of chronic illness and for women, the menopause, can all impact on sleep. Older people also *expect* their sleep to deteriorate with age, in part because of the widespread narratives and discourses of decline which accompany ageing; (ii) *Institutional structures*, such as engagement in paid work or education, have a complex relationship with sleep (Figure 1); with the unemployed reporting the poorest sleep and a gradient existing within occupation categories of those employed. Large scale institutional structural changes, such as those witnessed in times of economic downturn, can strongly influence sleep through increased material and structural disadvantage and crowded households; (iii) *Relational structures* such as family contact and family support interact to influence sleep. For individuals with 'strained' family relationships, the chances of experiencing troubled sleep increase with more frequent family contact (Ailshire and Burgard 2012); and (iv) *Biographical transitions* associated with life events and other transitions, such as marriage, parenthood, retirement, divorce, and widowhood, all of which may impact on sleep. As Meadows and Arber (2015) show in their analysis of 37,255 adults, whilst marriage appears to generally 'protect' individuals from poor sleep (Figure 1) the *quality* of the marriage is also important. Those who are 'married with medium/high relationship distress' report poorer sleep than both people who are 'single' and those 'cohabiting with low relationship distress'.

These four temporal dynamics intersect with *gender*. Biomedical studies of sleep tend to identify and explain differences between men and women's sleep in terms of physiology and hormones. Yet, this view misses a vital determinant; within contemporary societies there remains a set of social and cultural assumptions of what it is to be a 'man' or a 'woman' which carry with them ideas of appropriate social roles, behaviours and attitudes. This is part of the reason why women's sleep is more likely than men's to be disturbed by caregiving and why the link between divorce, sleep and health is worse for women than men (Meadows and Arber 2015). In one of the few empirical studies to consider gendered expectations surrounding sleep and sleep disturbance, Venn (2007) found that while women were embarrassed about their snoring, men tended to discuss snoring openly and be unapologetic about it. The 'problem' of snoring was often left to the female partner, whose sleep was disrupted, to deal with rather than the snorer. Venn argues that the strategies women develop to cope with their partners' snoring are in line with normative expectations of femininity and of women being adaptive and passive. These strategies, which include prodding (but not waking their partner), passivity and (occasionally) re-location, can prolong their sleep disturbance rather than alleviate it.

Seen in this way, the (neuro)biological remains of key concern but sleep is not simply reduced to it; rather sociology opens up significant new opportunities to explore the dynamic interrelations between social and biological factors regarding sleep and sleep disruption across the life course. Researching sleep in the context of peoples' everyday lives requires the use of both more standardised or objective measures such as polysomnography and watch actigraphy, but also interviews, focus groups and audio sleep diaries (Hislop et al 2005). A *relational* or *dyadic* focus is also called for given the interdependences between couples' sleep and between the sleep of care-givers and care-recipients.

Medicalising sleep? Problems and prospects

Medicalisation, simply stated, involves the 'making medical' of some hitherto 'non-medical' matter (Conrad 2007). This in turn may occur to differing degrees, at differing levels, with the potential for de-medicalisation over time too. Contrary to popular assumptions, however, medicalization is not necessarily or solely a doctor-driven process. Nor does it involve any

inbuilt assumptions of over-medicalisation or value judgements as to whether the medicalization of something is a 'good' or 'bad' thing.

As we know, sleep medicine is a relatively new sub-speciality within medicine, developing over the latter part of the 20th Century, particularly in the US. It can be considered a multi-disciplinary cross-speciality area involving a broad range of medical professionals including respiratory specialists, neurologists, psychiatrists and general practitioners to name but a few. This reflects the wide range of 'sleep disorders' that are now clinically recognised and can be medically treated from respiratory conditions such as Obstructive Sleep Apnoea to neurological disorders such as narcolepsy and Restless Legs Syndrome and circadian rhythm disorders such as 'jet lag syndrome' and 'shift work disorder'. However, the provision of clinical sleep services and access to sleep medicine experts remains patchy, in the UK at least, with sleep medicine sitting on the fringe of the healthcare system.

Sleep, then, can be considered a complex if not contradictory case of medicalization; a more or less medicalised matter, depending on which particular dimensions of sleep we are looking at. Five key issues nevertheless are important to address here.

The first concerns the fact, despite the growth of sleep medicine in recent decades and the supposed 'epidemic' of sleep disorders in our midst, that many sleep problems never reach the doctor's surgery. Those that do, sleep experts claim, may still go undiagnosed and untreated due to doctor's lack of basic training in sleep medicine. It is not simply a case of a need for better public education or improved sleep 'literacy' however, important as that is. Rather, as recent sociological studies attest, it is also due to the fact that sleep is a *moral* matter, including what might be termed moral and temporal 'hierarchies of resort' as to 'if' and 'when' seeing a doctor is legitimate depending on the particular sleep problem in question. Thus whilst narcolepsy for instance may be seen as a sleep problem requiring medical attention, sleeplessness or insomnia may not, except as a last resort when all other options have failed.

A second closely related issue concerns the role of *pharmaceuticals* in the medicalisation of sleep. Pharmaceuticals are a key part of the medicalization of sleep, with approximately 10 million prescriptions for hypnotics dispensed in the community in England and approximately 60 million in the US each year. On the one hand, we witness campaigns for wider access to sleep medications, such as sodium oxybate for narcolepsy sufferers. On the other hand, a series of counter-trends may also be noted in Britain today, which if not quite amounting to the de-pharmaceuticalisation of sleep(lessness) nevertheless suggest an increasing emphasis on other first-line non-pharmacological interventions such as good sleep hygiene and cognitive behavioural therapies, resources permitting, and life style changes for problems like insomnia. Sleep medicines are highly moralised matters, particularly prescription hypnotics, which are commonly regarded as a 'last resort' -- for 'deserving' if not 'desperate', yet 'responsible', patients -- when all else fails (Gabe et al, forthcoming). Sleep, then is a *partially medicalised* yet a *thoroughly moralised* matter, including perhaps moral *reluctance* if not *resistance* to any further medicalization of sleep matters in the future, however well-intentioned this may be. It is not just a case of the *pharmaceuticalisation* or *depharmaceuticalisation* of sleep problems today however, but the wider reported uses of wakefulness promoting drugs amongst the otherwise healthy for lifestyle or enhancement purposes. Sleep in these ways, then, is not simply being medicalised, or even pharmaceuticalised, but *customised* too perhaps in the 24/7 society, from the workplace nap to wakefulness promoting drugs (Williams et al. 2014).

A third key issue concerns the role of the *media*. A variety of roles may be pointed to in this regard, including both negative and positive media reporting. On the one hand, the media may actively challenge or criticise certain aspects of the medicalisation of sleep, as recent media coverage of research suggesting that hypnotics increase the risk of premature death demonstrates. On the other hand, the media may facilitate if not amplify processes of medicalization in popular culture through the framing of sleep problems in particular ways (Seale et al. 2007), including the potential for further public anxiety inflation through a focus on the risks of poor sleep for public health and safety. However audiences do not simply passively absorb these messages but interact with them in complex ways to challenge, reject or extend them in the context of their everyday lives. To the extent moreover, as Kroll-Smith (2003) shows, that the boundaries between medicine and popular culture are increasingly

porous, then the potential exists, through resort to the ‘rhetorical authority of medicine’, for the media to contribute to turning somatic states such as ‘excessive daytime sleepiness’ into proto- or quasi-disorders in their own right, independently of institutional medicine; a potential made all the more likely given the multiple online opportunities to self-rate if not self-diagnose how ‘excessively’ sleepy we all are in the information age.

A fourth closely related matter concerns the role of *new digital technologies* in the medicalization of sleep, both now and in the future. It is no longer simply a matter of accessing medical information online, important as that still is, but of new digital apps and smart devices to help us monitor, measure and manage our sleep ourselves, if not become our very own sleep experts, far beyond the doctor’s surgery or the sleep clinic (Williams et al 2015). Through the use of these technologies, people not only acquire new knowledge about their sleep, but also access information and advice on how they might improve it, which may bring many significant benefits for medicine and public health, particularly in the age of so-called ‘big data’. However, the potential for further inflated public anxiety if not new ‘epidemics’ of the ‘chronorexic’ kind (Van den Bulck 2015), as we dutifully, if not obsessively, check our body data and sleep metrics, day and night. Increasing emphasis on ‘gamification’ in health applications— that is the use of ‘gaming’ elements to motivate people in ‘non-game’ contexts (King et al 2013)— may also give rise to sleep becoming a competition, scored and shared with others; which in turn flags further issues surrounding both the potential benefits for public health and possibilities for inflated anxiety.

A fifth key issue concerns not simply the medicalization but the ‘*healthicisation*’ of sleep today. Whilst medicalisation denotes the transformation of sleep into a medical problem through the language of disorder, healthicisation emphasises the importance of sleep for health, if not happiness and well-being. Healthicisation then, once again, is more a moral than a medical matter, exemplified through good sleep hygiene and sleep wise lifestyles.

As for the broader *politics of sleep* (Williams 2011), the key point to stress perhaps is this: *downstream* measures of the medicalised kind, however beneficial, can only achieve so much when the ultimate causes or drivers of many sleep problems and inequalities today lie

upstream in the wider workings of society (e.g. Figure 1). Sociology then, in keeping with public health, has much to contribute to these upstream and downstream agendas, in the interests of a better if not a well-slept society.

Conclusions

A sociological approach to sleep, as this chapter attests, sheds valuable new light on relations between sleep and society. A number of conclusions may be drawn here. First, sleep occurs in a social context, whether public or private, and is socially, culturally and historically variable. Second, at the empirical level, recent sociological research has shown that sleep (and its meaning) is influenced by numerous social factors across the life course, as well as by transitions, such as marriage/cohabitation, parenthood, care-giving and widowhood. This moreover includes the importance of considering how gender impacts on sleep, and the nature of power in negotiations about sleep. Third, medicating sleep is a highly moralised issue within contemporary societies, with people on the one hand, reluctant to ‘give in’ to sleeping medication, feeling that they *should* be able to manage problems such as sleeplessness or insomnia themselves without recourse to doctors and prescription sleeping pills, and on the other, those with diagnosed sleep disorders campaigning for wider access to medications they believe will be beneficial to them. Sleep, therefore, can be considered a complex if not contradictory case of medicalization; a more or less medicalised matter, depending on which particular dimensions of sleep we are considering.

These conclusions have three important implications for current and future research, policy and practice in epidemiology and public health: First, in focusing attention on the micro/hidden aspects of everyday life, sociological research into sleep has highlighted arenas of action. For example, developing a richer understanding of the complexities of the caregiving/sleep nexus is clearly a public health priority; given that, in 2011, there were 5.78 million unpaid carers in England and Wales alone. Second, sociological studies of sleep have played a key role in highlighting how those with fewer resources and opportunities are those with poorer sleep. One response to this would be to suggest that sleep is patterned in this way because of the free choices of individual actors; however, as Hale and Hale (2009) highlight, it is difficult to justify this ‘voluntary’ explanation. The decisions which characterize sleep are significantly different from those regarding other health behaviours.

For example, one cannot voluntarily chose one's sleep duration: "one is either sleeping and thus not experiencing, or one is experiencing and thus not sleeping" (Hale and Hale 2009: 362). An individual's sleep behaviours are always tied to aspects of their life circumstances; such as jobs, demands of the workplace, neighbourhood environments, education and childrearing. To improve sleep, and in turn, health, public health should facilitate improvement in these wider spheres as a matter of '*social justice*'. A fairer society, in other words, might be a better-slept, if not healthier, society too. Sleep moreover is another vital part of the general well-being (GWB) as well as the gross domestic product (GDP) political agendas today, recognised or not. Third, sociology continues to highlight the complex, wider, arena on which public health must reflect. Sleep, as we have shown, is more than simply a medical matter; with the boundaries between medicine, morality and popular culture complex and multifaceted. Public health does not exist out-with these porous boundaries.

References

- Ailshire, J. A., & Burgard, S. A. (2012). Family relationships and troubled sleep among US adults examining the influences of contact frequency and relationship quality. *Journal of Health and Social Behavior*, 53(2), 248-262.
- Arber, S & Meadows, R. (2011) 'The Social and Health Patterning of Sleep Quality and Duration' in McFall, S. L., & Garrington, C. (eds). *Early findings from the first wave of the UK's household longitudinal study*. Colchester: Institute for Social and Economic Research, University of Essex.
- Bianchera E, & Arber S. (2007) 'Caring and sleep disruption among women in Italy'. *Sociological Research Online*, 12 (5)
- Conrad, P. (2007). *The Medicalization of Society. On the Transformation of Human Conditions into Treatable Diseases* Johns Hopkins University Press.
- Gabe, J., Coveney, C.M., Williams, S.J. (forthcoming) Prescriptions and proscriptions: Moralising sleeping pills, *Sociology of Health and Illness*, 38, 4
- Hale, B., & Hale, L. (2009). Is justice good for your sleep? (And therefore, good for your health?). *Social Theory & Health*, 7(4), 354-370.
- Hislop, J., Arber, S., Meadows, R., & Venn, S. (2005). Narratives of the night: The use of audio diaries in researching sleep. *Sociological Research Online*, 10(4).
- Hislop, J & Arber, S. (2006) Sleep, gender and aging in Calasanti, T. M. and Slevin, K. F. (eds) *Age Matters: Realigning Feminist Thinking* Routledge: London
- King, D., Greaves, F., Exeter, C., & Darzi, A. (2013). 'Gamification': Influencing health behaviours with games. *Journal of the Royal Society of Medicine*, 106(3), 76-78.
- Kroll-Smith, S. (2003). Popular media and 'excessive daytime sleepiness': a study of rhetorical authority in medical sociology. *Sociology of health & illness*, 25(6), 625-643.
- Meadows, R., & Arber, S. (2015). Marital Status, Relationship Distress, and Self-rated Health What Role for "Sleep Problems"? *Journal of Health and Social Behavior*, 56(3), 341-355.

Seale, C., Boden, S., Williams, S., Lowe, P., & Steinberg, D. (2007). Media constructions of sleep and sleep disorders: A study of UK national newspapers. *Social Science & Medicine*, 65(3), 418-430.

Van den Bulck, J. (2015). Sleep apps and the quantified self: blessing or curse?. *Journal of Sleep Research*, 24(2), 121-123.

Venn, S. (2007). 'It's Okay for a Man to Snore': The Influence of Gender on Sleep Disruption in Couples. *Sociological Research Online*, 12(5), 1.

Venn, S., Arber, S., Meadows, R., & Hislop, J. (2008). The fourth shift: exploring the gendered nature of sleep disruption among couples with children. *The British Journal of Sociology*, 59(1), 79-97.

Williams, S. J. (2011). *The Politics of Sleep: Governing (Un) Consciousness in the Late Modern Age*. Palgrave Macmillan Ltd..

Williams, S. J., Coveney, C. M., & Gabe, J. (2013). Medicalisation or customisation? Sleep, enterprise and enhancement in the 24/7 society. *Social Science & Medicine*, 79, 40-47.

Williams, S. J., Coveney, C., & Meadows, R. (2015). 'M-apping' sleep? Trends and transformations in the digital age. *Sociology of Health & Illness*, 37(7), 1039-1054.

Figure 1: Odds Ratios of reporting poor sleep quality with socio-demographic and socio-economic variables (age and sex adjusted)



Adapted from Arber and Meadows (2011). Data comes from the early release of Understanding Society (Wave 1). Data were collected in 2009 from a representative sample of 21717 households in Britain with a response rate of 59%. The total number of respondents in the presented analysis is circa 17000. The dependent variable is dichotomised so that those who rate their sleep as 'very good' or 'fairly good' are coded 0 and those who rate their sleep as 'fairly bad' or 'very bad' are recoded as 1. In each graph, the first category is the reference category (and therefore has odds of 1)

Summary Box 1: The Sociology of Sleep

- Sleep occurs in a *social context* and is socially, culturally and historically variable. Relations between the sociological and (neuro)biological dimensions of sleep are complex and variable.
- Sleep is influenced by numerous social factors across the *life course*, as well as by *transitions*, such as marriage/cohabitation, parenthood, care-giving and widowhood. These include the importance of how *gender* impacts on sleep, and the nature of *power in negotiations* about sleep.
- Sleep, is a complex if not contradictory case of medicalization; a more or less medicalised matter, depending on which particular dimensions of sleep are being considered. Sleep is also a thoroughly moralised matter which may or may not result in a visit to the doctor and the taking of sleep medicines depending on the sleep problem in question.
- Understanding sleep requires the use of *qualitative* as well as *quantitative* methodologies, including interviews, focus groups and audio sleep diaries as well as other more standardised or objective measures such as watch actigraphy. A *relational* or *dyadic* focus on *couples' sleep* is also called for given sleeping together is the norm in adult life.
- Sociology highlights arenas for public health intervention. These include recognising that sleep may be different from other health related behaviours and may be better improved by targeting resources and opportunities available to individuals rather than simply targeting sleep itself.